# **TÁMOP 4.2.2-08/1**

### 1-2008-0014

Project title: Pharmacological possibilities for the treatment of insulin resistance and diabetes

**Summary:** The consortium formed by the University of Debrecen and the Biological Research Centre of the Hungarian Academy of Sciences will assemble an innovative research team for the identification and validation of novel molecules opening the way for a new type of drug development. Our objective is to patent molecules that will serve as the basis for the development of medicaments necessary for the definitive rather than only the symptomatic treatment of type 2 diabetes.

Project duration: 1 August 2009 - 31 January 2012

Fund of the project: 425 000 000 Ft Fund of the BRC: 116 314 000 Ft Contact person in BRC: László Vígh

### 1-2008-0006

**Project title:** International innovative research team for developing fact-based test systems for an environment and health conscious way of life

**Summary:** The Hungarian population is not aware of owning a possession of great value, their health. Demand for adequate health preservation programs has started to increase, but supply is scanty: in spite of our excellent talents and resources, we are short of specialists and high-level services. In the field of education, the project aims at satisfying the demand for more specialists on the highest possible level. In the field of practical services, the project offers a genome-based health and fitness program package that employs physical activity to commence the treatment of pathological conditions even before the appearance of symptoms. A similar primary prevention program providing dietetic advice was launched in the U.S.A in 2008.

Project duration: 1 July 2009 - 31 Marc 2012

Fund of the project: 292 808 700 Ft Fund of the BRC: 16 751 000 Ft Contact person in BRC: László Puskás

#### 1-2008-0008

Project title: Sensory network based data collection and information processing

**Summary:** The objective of the project is the organization at the University of Szeged and the operation, at the international level, of a research group committed to modelling and analyzing the elements and the totality of sensory networks. The program is realized in a joint effort of scientists working in the fields of informatics, mathematics, natural science, human health care and economic sciences. The research planned will yield information regarding the behaviour of complicated sensory networks and will make possible the design of such networks and processing of the data measured.

Project duration: 1 August 2009 - 30 November 2011

Fund of the project: 341 185 099 Ft Fund of the BRC: 12 993 984 Ft Contact person in BRC: Sándor Pongor

## 1-2008-0002

**Project title:** Pathomechanism and therapeutic possibilities of neurodegenerative diseases, anxiety and depression

**Summary:** The two separate objectives of our project are the elucidation of the pathomechanism of and the search for novel therapeutic methods to treat (i) neurodegenerative diseases such as Alzheimer's and Huntington disease, and (ii) depression and anxiety. This international basic research project is based on the intensive collaboration of research groups of international renown in Hungary and abroad applying and developing a multidisciplinary, molecular biological, pharmaceutical and medical approach and physicians active in human health care.

Project duration: 1 July 2009 - 28 February 2012

Fund of the project: 312 080 000 Ft Fund of the BRC: 51 680 000 Ft

Contact person in BRC: László Siklós, Árpád Párducz, Miklós Sántha, László Vígh

#### 1-2008-0005

**Project title:** Organization of an innovative multidisciplinary research team for studying neurodegenerative diseases related to changes in protein conformation

**Summary:** A dynamically assembling research team applying novel methods will be organized within the framework of this project, with the aim of studying protein conformational diseases, the first being prion diseases. The objective of the planned research + development is to lay the foundation of sensitive diagnostics and effective therapy. Our significant research and development activity of international renown will contribute to the high-level performance of educational tasks in the participating institutions and will also enhance the innovative role of the region.

Project duration: 1 June 2009 - 31 August 2011

Fund of the project: 327 926 900 Ft Fund of the BRC: 194 842 200 Ft Contact person in BRC: Ervin Welker

#### 1-2008-0001

**Project title:** International, interdisciplinary photobiological research for studying the interactions of environmental and genomic factors and for the development of new diagnostic and therapeutic procedures **Summary:** The objective of our project is the identification of molecular mechanisms and components playing a role in the perception of UV irradiation and in the prevention of its deleterious effects. This international basic research project is based on the intensive collaboration of research groups of international renown in Hungary and abroad applying and developing a multidisciplinary, molecular, genetical, mathematical, physical, chemical, pharmaceutical and medical approach and physicians active in human health care.

Project duration: 1 July 2009 - 30 September 2011

Fund of the project: 307 524 000 Ft Fund of the BRC: 179 910 816 Ft Contact person in BRC: Ferenc Nagy

#### 1-2008-0013

**Project title:** Development of the teranostics of circulatory, metabolic and inflammatory diseases **Summary:** Diagnostics + Therapy = Teranostics, the R&D basis of personalized therapy. Our objective is to organize a multidisciplinary consortial research group based on the unique cardiovascular, metabolic, molecular diagnostic and pharmaceutical capacities of the University of Szeged and of the institutes of the Hungarian Academy of Sciences residing in Szeged that will be capable of attracting scientists from the international job market, and will promote the settlement of industrial companies active in the field of teranostic technologies in the Southern Great Plain Region.

Project duration: 1 September 2009 - 31 October 2011

Fund of the project: 381 348 000 Ft Fund of the BRC: 93 032 670 Ft

Contact person in BRC: László Puskás, László Vígh, Ibolya Kiss, Miklós Sántha

# **TÁMOP 4.2.3-08/1**

### 1-2008-0009

**Project title:** Molecular biology and everyday life – presentation and popularization of the scientific results of the Biological Research Centre of the Hungarian Academy of Sciences in the Southern Great Plain Region **Summary:** Our objective is the efficient dissemination of the scientific results of BRC HAS, a Centre of Excellence of the European Union towards the stakeholders of societal and economic life. The project utilizes the complete communication toolkit of the 21st century in order to introduce new media and novel functions and to reach a wide range of target groups. We expect efficient transfer of information, increasing interest in biotechnology and development of stronger social and economic relationships.

**Project duration:** 1 October 2009 – 31 September 2011

Fund of the project: 33 993 625 Ft Fund of the BRC: 27 023 625 Ft Contact person in BRC: Péter Heffner